

What us claimed is:

1. A method of defining the deviation of a pixel site of pixels of at least one image recording matrix from a desired position, comprising the steps of:
  - 5 a) integrating the image recording matrix into an optical 3-D measuring system at least while the method is being practiced;
  - b) making an object available which is suitable for being measured by a 3-D measuring system, the object being either planar or curved such that during smoothing local errors of the 3-D data only are averaged out without changing the contours of the object;
  - 10 c) measuring the object by a 3-D measuring system for determining the 3-D data of the object;
  - d) smoothing the determined 3-D data of the object;
  - e) projecting the 3-D measuring points back to sensors of at least one matrix camera utilizing the determined and the smoothed 3-D data;
  - 15 f) determining the difference between the positions of the two points projected back to the sensors associated with a 3-D measuring point;
  - g) selectively shifting the object relative to the 3-D measuring system;
  - 20 h) repeating steps b) through g) until the desired accuracy of the deviations to be determined by the method of the pixel site of pixels of an image recording matrix has been attained, the accuracy being a function of the repetitions and the number of shifts; and
  - i) defining the deviation of the pixel site of the pixels from the desired position from the values determined by step f) for one of each pixel and selected pixels.
3. The method of claim 2, wherein the shifting between object and measuring system is carried out substantially in the direction of the surface  
30 normal of the object.

4. The method of claim 2, wherein the deviation of the pixel site of the pixels from the desired position is determined by defining for each pixel the error of the pixel site by forming an average value of the values determined in step f) and relevant to the given pixel.

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5. The method of claim 2, wherein the deviation of the pixel site of the pixels from the desired position is determined by approximating by a function for each pixel the error of the pixel site by forming an average value of the values determined in step f).

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6. The method of claim 2, wherein the image recording matrix comprises CCD sensor means.

7. The method of claim 2, wherein the image recording matrix comprises CMOS sensor means.

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8. The method of claim 2, wherein the described position is defined by calibration of the measuring system.

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